

Docket No. AUS920030465US1

CLAIMS:

What is claimed is:

- 5 1. A method of adaptively reconfiguring a pool of buffers,
the buffers having a current size, the method
comprising the steps of:

receiving data of a particular size to be stored in one
10 of the buffers;

counting each time data of the particular size is
received to be stored in one of the buffers;

15 determining whether the particular size of the data is
greater than the current size of the buffers; and

reconfiguring the current size of the buffers to the
particular size of the data if the particular size of
20 the data is greater than the current size of the
buffers and if the number of times data of the
particular size is stored in one of the buffers is
greater than a first threshold.
- 25 2. The method of Claim 1 wherein the reconfiguring step
includes the step of determining whether more memory
space may be allocated before reconfiguring the buffers
to the particular size of the data.
- 30 3. The method of Claim 2 wherein the data being received
is being read from or written to a storage device by an
application program and if more memory space may not be

Docket No. AUS920030465US1

allocated, a signal is sent to the application program to reduce the size of the data being read from or written to the storage device.

- 5 4. The method of Claim 1 wherein the current size of the buffers is reconfigured to the particular size of the data if the particular size of the data is smaller than the current size of the buffers and if the number of times data of the particular size is stored in one of
10 the buffers is smaller than a second threshold.
5. The method of Claim 4 wherein before the buffers are reconfigured to the particular size of the data it is determined whether memory space is needed for other
15 purposes.
6. The method of Claim 5 wherein the data being received is being read from or written to a storage device by an application program and if memory space is not needed,
20 a signal is sent to the application program to increase the size of the data being read from or written to the storage device.
7. The method of Claim 6 wherein the first and second
25 thresholds are reconfigured based on system requirements.
8. The method of Claim 7 wherein the buffers are reconfigured if the sum of all requests for all buffer
30 sizes is smaller than the second threshold.

Docket No. AUS920030465US1

9. The method of Claim 1 wherein the buffers are reconfigured if the sum of all requests for all buffer sizes is greater than the first threshold.

5 10. A computer program product on a computer readable medium for adaptively reconfiguring a pool of buffers, the buffers having a current size, the computer program product comprising:

10 code means for receiving data of a particular size to be stored in one of the buffers;

code means for counting each time data of the particular size is received to be stored in one of the
15 buffers;

code means for determining whether the particular size of the data is greater than the current size of the buffers; and

20 code means for reconfiguring the current size of the buffers to the particular size of the data if the particular size of the data is greater than the current size of the buffers and if the number of times data of
25 the particular size is stored in one of the buffers is greater than a first threshold.

11. The computer program product of Claim 10 wherein the reconfiguring code means includes code means for
30 determining whether more memory space may be allocated before reconfiguring the buffers to the particular size of the data.

Docket No. AUS920030465US1

12. The computer program product of Claim 11 wherein the data being received is being read from or written to a storage device by an application program and if more
5 memory space may not be allocated, a signal is sent to the application program to reduce the size of the data being read from or written to the storage device.
13. The computer program product of Claim 10 wherein the
10 current size of the buffers is reconfigured to the particular size of the data if the particular size of the data is smaller than the current size of the buffers and if the number of times data of the particular size is stored in one of the buffers is
15 smaller than a second threshold.
14. The computer program product of Claim 13 wherein before the buffers are reconfigured to the particular size of the data it is determined whether memory space is
20 needed for other purposes.
15. The computer program product of Claim 14 wherein the data being received is being read from or written to a storage device by an application program and if memory
25 space is not needed, a signal is sent to the application program to increase the size of the data being read from or written to the storage device.
16. The computer program product of Claim 15 wherein the
30 first and second thresholds are reconfigured based on system requirements.

Docket No. AUS920030465US1

17. The computer program product of Claim 16 wherein the buffers are reconfigured if the sum of all requests for all buffer sizes is smaller than the second threshold.
- 5 18. The computer program product of Claim 10 wherein the buffers are reconfigured if the sum of all requests for all buffer sizes is greater than the first threshold.
- 10 19. A system for adaptively reconfiguring a pool of buffers, the buffers having a current size, the system comprising:

at least one storage system for storing code data; and

15 at least one processor for processing the code data to receive data of a particular size to be stored in one of the buffers, to count each time data of the particular size is received to be stored in one of the buffers, to determine whether the particular size of
20 the data is greater than the current size of the buffers, and to reconfigure the current size of the buffers to the particular size of the data if the particular size of the data is greater than the current size of the buffers and if the number of times data of
25 the particular size is stored in one of the buffers is greater than a first threshold.
- 30 20. The system of Claim 19 wherein the code data is further processed to determine whether more memory space may be allocated before reconfiguring the buffers to the particular size of the data.

Docket No. AUS920030465US1

21. The system of Claim 20 wherein the data being received is being read from or written to a storage device by an application program and if more memory space may not be allocated, a signal is sent to the application program to reduce the size of the data being read from or written to the storage device.
22. The system of Claim 19 wherein the current size of the buffers is reconfigured to the particular size of the data if the particular size of the data is smaller than the current size of the buffers and if the number of times data of the particular size is stored in one of the buffers is smaller than a second threshold.
23. The system of Claim 22 wherein before the buffers are reconfigured to the particular size of the data it is determined whether memory space is needed for other purposes.
24. The system of Claim 23 wherein the data being received is being read from or written to a storage device by an application program and if memory space is not needed, a signal is sent to the application program to increase the size of the data being read from or written to the storage device.
25. The system of Claim 24 wherein the first and second thresholds are reconfigured based on system requirements.

Docket No. AUS920030465US1

26. The system of Claim 25 wherein the buffers are reconfigured if the sum of all requests for all buffer sizes is smaller than the second threshold.

5 27. The system of Claim 19 wherein the buffers are reconfigured if the sum of all requests for all buffer sizes is greater than the first threshold.